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70

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/623,568		Barbara Miller	98-1895	5274

23377 7590 12/14/2007
WOODCOCK WASHBURN LLP
CIRA CENTRE, 12TH FLOOR
2929 ARCH STREET
PHILADELPHIA, PA 19104-2891

EXAMINER

ZEMAN, ROBERT A

ART UNIT PAPER NUMBER

1645

MAIL DATE DELIVERY MODE

12/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



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APPLICATION NO./ CONTROL NO. 09/623,568	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION MILLER, BARBARA	ATTORNEY DOCKET NO.
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EXAMINER

Robert A. Zeman

ART UNIT	PAPER
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1645

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents

The communication filed on 6-6-2002 is not fully responsive to the Office communication mailed 7-11-2001 for the reason(s) set forth on the attached Notice to Comply With the Sequence Rules or CRF Diskette Problem Report.

Since the above mentioned reply appears to be *bona fide*, applicant is given a TIME PERIOD of ONE (1) MONTH or THIRTY DAYS from the mailing date of this notice, which ever is longer, within which to supply the omission or correction in order to avoid abandonment. EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER C.F.R. 1.136(a).


The addresses below are effective 5 June 2004. Please direct all replies to the United States Patent and Trademark Office via one (1) of the following:

1. Electronically submitted through EFS-Bio
(<http://www.uspto.gov/ebs/efs/downloads/documents.htm>), EFS Submission User Manual - ePAVE)
2. Mailed to:
Mail Stop Sequence
Commissioner for Patents
P.O. Box 22313-1450
Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service or other delivery service to:
U.S. Patent and Trademark Office
Mail Stop Sequence
Customer Window

Randolph Building
401 Dulaney Street
Alexandria, VA 22314

Any inquiry concerning this communication should be directed to Examiner Robert A. Zeman, Art Unit 1645, whose telephone number is (571) 272-0866.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.



ROBERT A. ZEMAN
PRIMARY EXAMINER

Notice to Comply	Application No. 09/623,568	Applicant(s) MILLER, BARBARA	
	Examiner Robert A. Zeman	Art Unit 1645	

NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES

Applicant must file the items indicated below within the time period set the Office action to which the Notice is attached to avoid abandonment under 35 U.S.C. § 133 (extensions of time may be obtained under the provisions of 37 CFR 1.136(a)).

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the following reason(s):

- 1. This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (June 1, 1998) and 1211 OG 82 (June 23, 1998).
- 2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 C.F.R. 1.821(c).
- 3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 C.F.R. 1.821(e).
- 4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing."
- 5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d).
- 6. The paper copy of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 C.F.R. 1.821(e).
- 7. Other:_____

Applicant Must Provide:

- An initial or substitute computer readable form (CRF) copy of the "Sequence Listing".
- An initial or substitute paper copy of the "Sequence Listing", **as well as an amendment specifically directing its entry into the application.**
- A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d).

For questions regarding compliance to these requirements, please contact:

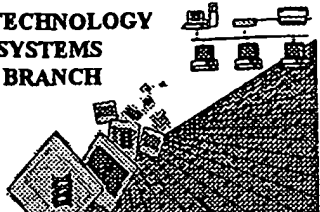
For Rules Interpretation, call (571) 272-0731 or (571) 272-0951
 For CRF Submission Help, call (571) 272-2510
 PatentIn Software Program Support
 Technical Assistance. 1-866-217-9197 or 703-305-3028 or 571-272-6845
 PatentIn Software is Available At www.USPTO.gov

PLEASE RETURN A COPY OF THIS NOTICE WITH YOUR REPLY

P. Booker
9/200

1045

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SYSTEMS
BRANCH



RECEIVED

SEP 03 2002

TECH CENTER 1600/2900

RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/623,568A
Source: 1600
Date Processed by STIC: 8/28/2002

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY
FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)
PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebs/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 09/623,568A

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- | | | |
|----|---|--|
| 1 | <p>____ Wrapped Nucleics
 ____ Wrapped Aminos</p> | <p>The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."</p> |
| 2 | <p>____ Invalid Line Length</p> | <p>The rules require that a line not exceed 72 characters in length. This includes white spaces.</p> |
| 3 | <p>____ Misaligned Amino
 ____ Numbering</p> | <p>The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.</p> |
| 4 | <p>____ Non-ASCII</p> | <p>The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.</p> |
| 5 | <p>____ Variable Length</p> | <p>Sequence(s) ____ contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.</p> |
| 6 | <p>____ PatentIn 2.0
 ____ "bug"</p> | <p>A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.</p> |
| 7 | <p>____ Skipped Sequences
 (OLD RULES)</p> | <p>Sequence(s) ____ missing. If intentional, please insert the following lines for each skipped sequence:
 (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
 (ix) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 This sequence is intentionally skipped</p> <p>Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.</p> |
| 8 | <p>____ Skipped Sequences
 (NEW RULES)</p> | <p>Sequence(s) ____ missing. If intentional, please insert the following lines for each skipped sequence.
 <210> sequence id number
 <400> sequence id number
 000</p> |
| 9 | <p>____ Use of n's or Xaa's
 (NEW RULES)</p> | <p>Use of n's and/or Xaa's have been detected in the Sequence Listing.
 Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
 In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.</p> |
| 10 | <p>____ Invalid <213>
 ____ Response</p> | <p>Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence</p> |
| 11 | <p>____ Use of <220></p> | <p>Sequence(s) ____ missing the <220> "Feature" and associated numeric identifiers and responses.
 Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
 (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)</p> |
| 12 | <p>____ PatentIn 2.0
 ____ "bug"</p> | <p>Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.</p> |
| 13 | <p>____ Misuse of n</p> | <p>n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.</p> |



RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/623,568A

DATE: 08/28/2002
 TIME: 10:39:01

Input Set : A:\EP.txt
 Output Set: N:\CRF4\08282002\I623568A.raw

3 <110> APPLICANT: Miller, Barbara
 4 Osmani, Stephen
 5 Clawson, Gary
 6 Zhang, Min-Ying
 7 Norris, James
 9 <120> TITLE OF INVENTION: Use of Human Homolog Of A Nuclear Migration Gene For
 Treatment And
 10 Diagnosis Of Cancer
 12 <130> FILE REFERENCE: PSU-0016
 14 <140> CURRENT APPLICATION NUMBER: 09/623,568A
 15 <141> CURRENT FILING DATE: 2001-03-23
 17 <150> PRIOR APPLICATION NUMBER: 60/076,885
 18 <151> PRIOR FILING DATE: 1998-03-05
 20 <150> PRIOR APPLICATION NUMBER: PCT US99/04996
 21 <151> PRIOR FILING DATE: 1999-03-05
 23 <160> NUMBER OF SEQ ID NOS: 16
 25 <170> SOFTWARE: PatentIn version 3.1
 27 <210> SEQ ID NO: 1
 28 <211> LENGTH: 14
 29 <212> TYPE: PRT
 30 <213> ORGANISM: artificial Sequence
 32 <220> FEATURE:
 33 <223> OTHER INFORMATION: Peptide
 35 <400> SEQUENCE: 1
 37 Gly Cys Met Val Glu Lys Met Met Tyr Asp Gln Arg Gln Lys
 38 1 5 10
 41 <210> SEQ ID NO: 2
 42 <211> LENGTH: 15
 43 <212> TYPE: PRT
 44 <213> ORGANISM: artificial Sequence
 46 <220> FEATURE:
 47 <223> OTHER INFORMATION: Peptide
 49 <400> SEQUENCE: 2
 51 Asn Gly Ser Leu Asp Ser Pro Gly Lys Gln Asp Thr Glu Glu Asp
 52 1 5 10 15
 55 <210> SEQ ID NO: 3
 56 <211> LENGTH: 24
 57 <212> TYPE: DNA
 58 <213> ORGANISM: artificial Sequence
 60 <220> FEATURE:
 61 <223> OTHER INFORMATION: Oligonucleotide
 63 <400> SEQUENCE: 3
 64 ttctgttcgt ctgaagttgg cagc
 67 <210> SEQ ID NO: 4

Does Not Comply
 Corrected Diskette Needed
 see pp 1-3, 6

insufficient explanation - give source of
 genetic material
 (see item 11
 on Eval
 summary
 sheet)

same

same error as above

24

RAW SEQUENCE LISTING

DATE: 08/28/2002

PATENT APPLICATION: US/09/623,568A

TIME: 10:39:01

Input Set : A:\EP.txt

Output Set: N:\CRF4\08282002\I623568A.raw

68 <211> LENGTH: 24
 69 <212> TYPE: DNA
 70 <213> ORGANISM: artificial Sequence
 72 <220> FEATURE:
 73 <223> OTHER INFORMATION: Oligonucleotide
 75 <400> SEQUENCE: 4
 76 caatgaagtg aagtgagg agag 24
 79 <210> SEQ ID NO: 5
 80 <211> LENGTH: 38
 81 <212> TYPE: DNA
 82 <213> ORGANISM: artificial Sequence
 84 <220> FEATURE:
 85 <223> OTHER INFORMATION: Oligonucleotide
 87 <400> SEQUENCE: 5
 88 aaggtaccaa gatggactcc ccaggaagc aggatact 38
 91 <210> SEQ ID NO: 6
 92 <211> LENGTH: 32
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 94 <213> ORGANISM: artificial Sequence
 96 <220> FEATURE:
 97 <223> OTHER INFORMATION: Oligonucleotide
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 100 aaggatccaa gaaagttggg tggttgcagc tc 32
 103 <210> SEQ ID NO: 7
 104 <211> LENGTH: 20
 105 <212> TYPE: DNA
 106 <213> ORGANISM: artificial Sequence
 108 <220> FEATURE:
 109 <223> OTHER INFORMATION: Oligonucleotide
 111 <400> SEQUENCE: 7
 112 gaaagtccga ggttcgaaga 20
 115 <210> SEQ ID NO: 8
 116 <211> LENGTH: 20
 117 <212> TYPE: DNA
 118 <213> ORGANISM: artificial Sequence
 120 <220> FEATURE:
 121 <223> OTHER INFORMATION: Oligonucleotide
 123 <400> SEQUENCE: 8
 124 accaactaag aacggccatg 20
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 128 <211> LENGTH: 24
 129 <212> TYPE: DNA
 130 <213> ORGANISM: artificial Sequence
 132 <220> FEATURE:
 133 <223> OTHER INFORMATION: Oligonucleotide
 135 <400> SEQUENCE: 9
 136 agcaacatgc cgtcgaaccg ctcc 24
 139 <210> SEQ ID NO: 10
 140 <211> LENGTH: 24

RAW SEQUENCE LISTING

DATE: 08/28/2002

PATENT APPLICATION: US/09/623,568A

TIME: 10:39:01

Input Set : A:\EP.txt

Output Set: N:\CRF4\08282002\I623568A.raw

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141 <212> TYPE: DNA
142 <213> ORGANISM: artificial Sequence
144 <220> FEATURE:
145 <223> OTHER INFORMATION: Oligonucleotide
147 <400> SEQUENCE: 10
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151 <210> SEQ ID NO: 11
152 <211> LENGTH: 1281
153 <212> TYPE: DNA
154 <213> ORGANISM: Homo sapiens
156 <400> SEQUENCE: 11
157 ctagagtgca gagctccggg acgtggatcg gagccggcgc gatggcggga gagcaggagg      60
159 aggagcgggt cgacggcatg ttgctggcca tggctcagca gcacgagggc ggcgtgcagg      120
161 agcttgtgaa caccttcttc agcttccttc gacgcaaaac agacttttc attggaggag      180
163 aagaagggat ggcagagaag cttatcacac agactttcag ccaccacaat cagctggcac      240
165 agaagaccog gcgggagaag agagcccgcc aggaggccga gcggcgggag aaggcggagc      300
167 gggcggccag actggccaag gaagccaagt cagagacctc agggccccag atcaaggagc      360
169 taactgatga agaggcagag aggctgcagc tagagattga ccagaaaaag gatgcagaga      420
171 atcatgaggc ccagctcaag aacggcagcc ttgactcccc agggaagcag gatactgagg      480
173 aagatgagga ggaagatgag aaggacaaaag gaaaactgaa gcccaaccta ggcaacgggg      540
175 cagacctgcc caattaccgc tggaccacaga ccctgtcgga gctggacctg gcggtccctt      600
177 tctgtgtgaa cttccggctg aaaggggaagg acatgggtgtt ggacatccag cggcggcacc      660
179 tccgggtggg gctcaagggg cagccagcga tcattgatgg ggagctctac aatgaagtga      720
181 aggtggagga gagctcgtgg ctcattgagg acggcaaggt ggtgactgtg catctggaga      780
183 agatcaataa gatggagtgg tggagccgct tgggtgtccag tgacctgag atcaacacca      840
185 agaagattaa ccctgagaat tccaagctgt cagacctgga cagtgagact cgcagcatgg      900
187 tggaaaagat gatgtatgac cagcgacaga agtccatggg gctgccaaact tcagacgaac      960
189 agaagaaaca ggagattctg aagaagttca tggatcaaca tccggagatg gatttttcca     1020
191 aggctaaatt caactagccc ctgttttttc ctccctgaac tcttggggct gagctgcaac     1080
193 cacccaactt tctttccac tcttctctgg gacttgtggg cctcagggct tggggcaggc     1140
195 atgggactgg cccaggcaca caggtcccgg ggcatcagga gaaaggctgg gtcttgggac     1200
197 cttgtctctc ccagttggcc tactgttaca cattaaaacg atttgcccag ctcaaaaaa     1260
199 aaaaaaaaaa aaaaaaaaaa a
202 <210> SEQ ID NO: 12
203 <211> LENGTH: 331
204 <212> TYPE: PRT
205 <213> ORGANISM: Homo sapiens
207 <400> SEQUENCE: 12
209 Met Gly Gly Glu Gln Glu Glu Glu Arg Phe Asp Gly Met Leu Leu Ala
210 1 5 10 15
213 Met Ala Gln Gln His Glu Gly Gly Val Gln Glu Leu Val Asn Thr Phe
214 20 25 30
217 Phe Ser Phe Leu Arg Arg Lys Thr Asp Phe Phe Ile Gly Gly Glu Glu
218 35 40 45
221 Gly Met Ala Glu Lys Leu Ile Thr Gln Thr Phe Ser His His Asn Gln
222 50 55 60
225 Leu Ala Gln Lys Thr Arg Arg Glu Lys Arg Ala Arg Gln Glu Ala Glu
226 65 70 75 80
229 Arg Arg Glu Lys Ala Glu Arg Ala Ala Arg Leu Ala Lys Glu Ala Lys

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RAW SEQUENCE LISTING

DATE: 08/28/2002

PATENT APPLICATION: US/09/623,568A

TIME: 10:39:01

Input Set : A:\EP.txt

Output Set: N:\CRF4\08282002\I623568A.raw

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230          85          90          95
233 Ser Glu Thr Ser Gly Pro Gln Ile Lys Glu Leu Thr Asp Glu Glu Ala
234          100          105          110
237 Glu Arg Leu Gln Leu Glu Ile Asp Gln Lys Lys Asp Ala Glu Asn His
238          115          120          125
241 Glu Ala Gln Leu Lys Asn Gly Ser Leu Asp Ser Pro Gly Lys Gln Asp
242          130          135          140
245 Thr Glu Glu Asp Glu Glu Asp Glu Lys Asp Lys Gly Lys Leu Lys
246 145          150          155          160
249 Pro Asn Leu Gly Asn Gly Ala Asp Leu Pro Asn Tyr Arg Trp Thr Gln
250          165          170          175
253 Thr Leu Ser Glu Leu Asp Leu Ala Val Pro Phe Cys Val Asn Phe Arg
254          180          185          190
257 Leu Lys Gly Lys Asp Met Val Val Asp Ile Gln Arg Arg His Leu Arg
258          195          200          205
261 Val Gly Leu Lys Gly Gln Pro Ala Ile Ile Asp Gly Glu Leu Tyr Asn
262          210          215          220
265 Glu Val Lys Val Glu Glu Ser Ser Trp Leu Ile Glu Asp Gly Lys Val
266 225          230          235          240
269 Val Thr Val His Leu Glu Lys Ile Asn Lys Met Glu Trp Trp Ser Arg
270          245          250          255
273 Leu Val Ser Ser Asp Pro Glu Ile Asn Thr Lys Lys Ile Asn Pro Glu
274          260          265          270
277 Asn Ser Lys Leu Ser Asp Leu Asp Ser Glu Thr Arg Ser Met Val Glu
278          275          280          285
281 Lys Met Met Tyr Asp Gln Arg Gln Lys Ser Met Gly Leu Pro Thr Ser
282          290          295          300
285 Asp Glu Gln Lys Lys Gln Glu Ile Leu Lys Lys Phe Met Asp Gln His
286 305          310          315          320
289 Pro Glu Met Asp Phe Ser Lys Ala Lys Phe Asn
290          325          330
293 <210> SEQ ID NO: 13
294 <211> LENGTH: 332
295 <212> TYPE: PRT
296 <213> ORGANISM: Rattus rattus
298 <400> SEQUENCE: 13
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301 1          5          10          15
304 Met Ala Gln Gln His Glu Gly Gly Val Gln Glu Leu Val Asn Thr Phe
305          20          25          30
308 Phe Ser Phe Leu Arg Arg Lys Thr Asp Phe Phe Ile Gly Gly Glu Glu
309          35          40          45
312 Gly Met Ala Glu Lys Leu Ile Thr Gln Thr Phe Asn His His Asn Gln
313          50          55          60
316 Leu Ala Gln Lys Ala Arg Arg Glu Lys Arg Ala Arg Gln Glu Thr Glu
317 65          70          75          80
320 Arg Arg Glu Lys Ala Glu Arg Ala Ala Arg Leu Ala Lys Glu Ala Lys
321          85          90          95
324 Ala Glu Thr Pro Gly Pro Gln Ile Lys Glu Leu Thr Asp Glu Glu Ala

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RAW SEQUENCE LISTING

DATE: 08/28/2002

PATENT APPLICATION: US/09/623,568A

TIME: 10:39:01

Input Set : A:\EP.txt

Output Set: N:\CRF4\08282002\I623568A.raw

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325          100          105          110
328 Glu Arg Leu Gln Leu Glu Ile Asp Gln Lys Lys Asp Ala Glu Asn His
329          115          120          125
332 Glu Val Gln Leu Lys Asn Gly Ser Leu Asp Ser Pro Gly Lys Gln Asp
333          130          135          140
336 Ala Glu Glu Glu Glu Asp Glu Glu Asp Glu Lys Asp Lys Gly Lys Leu
337 145          150          155          160
340 Lys Pro Asn Leu Gly Asn Gly Ala Asp Leu Pro Asn Tyr Arg Trp Thr
341          165          170          175
344 Gln Thr Leu Ser Glu Leu Asp Leu Ala Val Pro Phe Arg Val Ser Phe
345          180          185          190
348 Arg Leu Lys Gly Lys Asp Val Val Val Asp Ile Gln Arg Arg His Leu
349          195          200          205
352 Arg Val Gly Leu Lys Gly Gln Ala Pro Val Ile Asp Gly Glu Leu Tyr
353          210          215          220
356 Asn Glu Val Lys Val Glu Glu Ser Ser Trp Leu Ile Glu Asp Gly Lys
357 225          230          235          240
360 Val Val Thr Val His Leu Glu Lys Ile Asn Lys Met Glu Trp Trp Asn
361          245          250          255
364 Arg Leu Val Thr Ser Asp Pro Glu Ile Asn Thr Lys Lys Ile Asn Pro
365          260          265          270
368 Glu Asn Ser Lys Leu Ser Asp Leu Asp Ser Glu Thr Arg Ser Met Val
369          275          280          285
372 Glu Lys Met Met Tyr Asp Gln Arg Gln Lys Ser Met Gly Leu Pro Thr
373          290          295          300
376 Ser Asp Glu Gln Lys Lys Gln Glu Ile Leu Lys Lys Phe Met Asp Gln
377 305          310          315          320
380 His Pro Glu Met Asp Phe Ser Lys Ala Lys Phe Asn
381          325          330
384 <210> SEQ ID NO: 14
385 <211> LENGTH: 198
386 <212> TYPE: PRT
387 <213> ORGANISM: Aspergillus nidulans
389 <400> SEQUENCE: 14
391 Met Ser Glu Gln Glu Pro Ser Ser Ala Asp Leu Ala Ala Arg Glu Ala
392 1          5          10          15
395 Glu Glu Lys Gln Arg Lys Ala Ala Glu Glu Ala Glu Gln Ala Thr Leu
396          20          25          30
399 Pro Tyr Lys Trp Thr Gln Thr Ile Arg Asp Val Asp Val Thr Ile Pro
400          35          40          45
403 Val Ser Ala Asn Leu Lys Gly Arg Asp Leu Asp Val Val Leu Lys Lys
404          50          55          60
407 Asp Ser Ile Lys Val Lys Val Lys Gly Glu Asn Gly Glu Val Phe Ile
408 65          70          75          80
411 Asp Gly Gln Phe Pro His Pro Ile Lys Pro Ser Glu Ser Ser Trp Thr
412          85          90          95
415 Leu Glu Thr Thr Ser Lys Pro Pro Gly Lys Glu Val Ser Ile His Leu
416          100          105          110
419 Asp Lys Val Asn Gln Met Glu Trp Trp Ala His Val Val Thr Thr Ala

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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/623,568A

DATE: 08/28/2002
TIME: 10:39:02

Input Set : A:\EP.txt
Output Set: N:\CRF4\08282002\I623568A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:16; Xaa Pos. 9,11

VERIFICATION SUMMARY

DATE: 08/28/2002

PATENT APPLICATION: US/09/623,568A

TIME: 10:39:02

Input Set : A:\EP.txt.

Output Set: N:\CRF4\08282002\I623568A.raw

L:496 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0